

DoD SELECTS FOREIGN DEFENSE EQUIPMENT FOR TESTING

The Department of Defense has selected seventeen new start projects and twenty continuing projects to receive Fiscal Year 2001 funding under the Foreign Comparative Testing (FCT) Program.

The FCT Program, authorized by Congress in 1989, is administered by the Director, Strategic and Tactical Systems, Office of the Under Secretary of Defense (Acquisition, Technology and Logistics).

The FCT Program responds to a growing awareness of the value of using nondevelopmental items to accelerate the acquisition process and cut rising development costs. The principal objective of the FCT Program is to support the U.S. warfighter by leveraging nondevelopmental items of allied and other friendly nations to satisfy U.S. defense requirements more quickly and economically. The FCT process is dependent on a world class foreign item, U.S. user interest in the item, a valid requirement, and good procurement potential. The goal is to reduce the acquisition cycle time and RDT&E expenditures while enhancing standardization and interoperability, and improving international cooperation.

FCT projects are nominated annually by the Services and U.S. Special Operations Command to the Office of the Secretary of Defense. Each proposed project is screened to ensure the item is non-developmental and addresses a valid requirement, a thorough market investigation has been conducted to identify all potential contenders, and the sponsoring organization has developed a viable strategy to purchase the foreign item if it tests successfully and offers best value.

Of the seventeen new start projects for FY 2001, five are sponsored by the Army, three by the Navy and Marine Corps, four by the Air Force, and five by the U.S. Special Operations Command. A list of these new projects and the continuing projects to be funded is attached. Additional FCT Program information is available on the FCT Homepage on the World Wide Web at <http://www.acq.osd.mil/sts/fct/>

FCT Projects Selected for FY 2001 Funding

ARMY NEW START PROJECTS

ANTENNA MAST FOR TACTICAL MOBILE COMMUNICATIONS (FINLAND,
FRANCE, GERMANY, SWEDEN, UK)
BRADLEY FIGHTING VEHICLE LONG-LIFE ROADWHEELS (REPUBLIC OF
SOUTH AFRICA)
HIGH MOBILITY EXCAVATOR (AUSTRALIA, GERMANY)
OPTICALLY IMPROVED STANDARD ADVANCED DEWAR ASSEMBLY TYPE II
(FRANCE)
PROPHET GROUND (ISRAEL, UNITED KINGDOM)

ARMY CONTINUING PROJECTS

LESS-SENSITIVE RDX (FRANCE)
LIGHTWEIGHT CHEMICAL AGENT DETECTOR (UNITED KINGDOM)
LIGHTWEIGHT HAND GRENADE (AUSTRIA, GERMANY)
MINE PROTECTED CLEARANCE VEHICLE (REPUBLIC OF SOUTH AFRICA)

NAVY/MARINE CORPS NEW START PROJECTS

SKIN/OPEN WOUND DECONTAMINATION (CANADA)
SUBMARINE TORPEDO ROOM BERTHING POD (NETHERLANDS)
VLF/LF COMPOSITE BUSHING REPLACEMENT (SWITZERLAND)

NAVY/MARINE CORPS CONTINUING PROJECTS

ANTI-JAM GPS ANTENNA (UNITED KINGDOM)
COMBAT VEHICLE TROOP SEAT (SWEDEN)
JOINT PROTECTIVE AIRCREW ENSEMBLE (FRANCE, GERMANY, ISRAEL,
SWEDEN, UNITED KINGDOM)
LIGHTWEIGHT ALUMINUM TRACK (GERMANY)
LIGHTWEIGHT DIESEL DRIVEN AUXILIARY POWER UNIT (GERMANY,
UNITED KINGDOM)
STAR TRACKER (DENMARK) [JOINT WITH THE AIR FORCE]
STEALTH SCREEN SYSTEM (FRANCE)
SUPERSONIC TARGET MISSILE (RUSSIA)

AIR FORCE NEW START PROJECTS

AIRBORNE VIDEO RECORDER/REPLAY SYSTEM (FRANCE)
INFRARED/UV THREAT STIMULATOR (UNITED KINGDOM)
TACTICAL LONG RANGE PASSIVE IR SENSOR (AUSTRALIA)
UNATTENDED GROUND IMAGER (ISRAEL)

AIR FORCE CONTINUING PROJECTS

INFRARED FLARE FOR C-17 AIRCRAFT (GERMANY)
PLASTIC PRACTICE BOMBS (UNITED KINGDOM)
RETRACTABLE ARRESTING CABLE SYSTEM (FRANCE)
SPACE QUALIFIED DIGITAL SIGNAL PROCESSOR (AUSTRIA, FRANCE)
WIDEBAND KLYSTRON FOR E-3 AWACS (UNITED KINGDOM)
WIND TUNNEL INTERNAL FORCE BALANCE (FRANCE, GERMANY,
NETHERLANDS, UNITED KINGDOM)

U.S. SPECIAL OPERATIONS COMMAND NEW START PROJECTS

ADVANCED DEMOLITION WEAPONS (FRANCE, GERMANY, SWEDEN)
CHEMICAL PROTECTIVE GLOVES (AUSTRIA, CANADA, FRANCE,
GERMANY)
MAAWS ILLUMINATION ROUND (SWEDEN)
MAN-PORTABLE MULTISENSOR SYSTEM (FRANCE, RUSSIAN FEDERATION,
SWEDEN)
PERSONAL TEMPERATURE REGULATION SYSTEM (GERMANY)

U.S. SPECIAL OPERATIONS COMMAND CONTINUING PROJECTS

ADVANCED LIGHTWEIGHT GRENADE LAUNCHER AMMUNITION (GERMANY,
NORWAY, SWEDEN)
MC-130H AERIAL REFUELING SYSTEM POD (UNITED KINGDOM)

A brief description of each project is available from the Public Affairs Office (media Only), (703) 695-0192; Public Communications (Non-Media Only), (703) 607-5737.

Description of FCT Projects Selected by OSD for FY 2001 Funding

Army New Start Projects

Antenna Mast for Tactical Mobile Communications — Finland, France, Germany, Sweden, UK. This FCT project will evaluate foreign non-developmental communications antenna mast systems for the Digitized Army, and is a small but vital portion of the full Warfighter Information Network-Terrestrial (WIN-T) program. The candidate systems are manufactured by Mast Systems (Finland), LERC (France), Daimler-Chrysler Aerospace/EMS Team (Germany), WIBE (Sweden), ARA (UK), and Clark Mast Systems (UK).

Bradley Fighting Vehicle Long-Life Roadwheels — Republic of South Africa. Through adaptations over the years, the Bradley Fighting Vehicle (BFV) has been upgraded to stay ahead of changing missions, capabilities, and technologies. As a result, more weight has been added to the vehicle system and more stress is exerted on the roadwheels. The objective of this FCT project is to qualify a urthane coating for roadwheels which is manufactured by Allthane Technologies of the Republic of South Africa to upgrade the BFV and extend its service life.

High Mobility Excavator – Australia, Germany. This FCT project seeks to meet the Army's requirement for a more transportable/mobile engineer vehicle which also directly supports an Army Chief-of-Staff initiative. The project will evaluate candidate excavators developed by ADI of Australia and Mercedes Benz of Germany for the following characteristics: C-130 deployability, all-wheel drive, diesel engine driven with backhoe, bucket loader, and design for multiple attachment acceptability.

Optically Improved Standard Advanced Dewar Assembly Type II — France. This FCT project will test and qualify the French SOFRADIR Optically Improved Standard Advanced Dewar Assembly Type II for integration into the Army's Horizontal Technology Integration (HTI) program second generation FLIRs. The SOFRADIR items incorporate the latest optical improvement requirements and represent state-of-the-art FLIR detector/dewar performance.

Prophet Ground — Canada, Israel, United Kingdom. This project will test the capabilities of signal intelligence subsystems developed by Racal of the United Kingdom and Tadiran of Israel to detect the presence of conventional and low probability of intercept (LPI) radios and determine the direction to the radio source. The subsystem must be able to be integrated into a High Mobility Multipurpose Wheeled Vehicle (HMMWV) and operate from the vehicle's organic power.

Army Continuing Projects

Less-Sensitive RDX — France. The U.S. currently has neither insensitive nor less-sensitive cast explosive fills suitable for 155mm artillery projectile applications. This FCT is evaluating RDX, a fundamental energetic compound in explosives, manufactured by SNPE of France, to determine if it meets the insensitivity requirements for cast explosives development. If successful, the technology from this FCT will be incorporated into all future U.S. munitions procurements.

Lightweight Chemical Agent Detector — United Kingdom. The Army has a requirement for an effective, portable, chemical-detection capability. This FCT project is evaluating a lightweight chemical agent detector (the LCD) manufactured by Graseby Dynamics of the United Kingdom to determine whether it meets or exceeds the requirement for personal warning/protection.

Lightweight Hand Grenade — Austria, Germany. This project is evaluating lightweight fragmentation hand grenades to replace the current M67 grenade. Arges of Austria and Diehl of Germany have lightweight hand grenades that appear to meet the U.S. Army's requirement for weight and lethality.

Mine Protected Clearance Vehicle — Republic of South Africa. The Army has a requirement for an integrated landmine discrimination and neutralization capability. This FCT project is evaluating candidate systems manufactured by Denel-Mechem and Reumech OMC, both of the Republic of South Africa, to determine their capability to uncover, remove and destroy landmines from unimproved roads.

Navy/Marine Corps New Start Projects

Skin/Open Wound Decontamination — Canada. Reactive Skin Decontamination Lotion, developed by O-Dell Engineering of Canada, is used by individual soldiers and medical personnel to decontaminate themselves and their equipment. This project will evaluate the Canadian item for use in the decontamination of skin/open wounds and equipment, and obtain U.S. Food and Drug Administration approval for use on U.S. personnel. The currently fielded M291 Skin Decontaminating Kit has been FDA approved, and can decontaminate equipment, but is limited to external use on skin that is intact.

Submarine Torpedo Room Berthing Pod — Netherlands. This FCT project will evaluate a berthing pod for submarines, manufactured by Polymarin and in service with the Royal Netherlands Navy. Submarine crewmembers are regularly required to sleep (and often hot bunk) in temporary torpedo room berths on several classes of submarines, including the newest Seawolf class submarines. The Dutch berthing pod is the size of a MK 48 torpedo and has 3 berths with individual lighting, forced air ventilation, and storage space. Use of these pods will address a longstanding problem and provide a dramatic quality of life improvement for U.S. submariners.

VLF/LF Composite Bushing Replacement — Switzerland. This FCT project will evaluate advanced porcelain bushings. developed by Cellpack Advanced Composites of Switzerland, which are used on communications antenna tuning elements that feed high voltage - high current for antenna power. Currently employed Navy communications bushings are near or past their operational service life and must be replaced.

Navy/Marine Corps Continuing Projects

Anti-Jam GPS Antenna — United Kingdom. This FCT project is evaluating a compact, anti-jam antenna system produced by Raytheon Systems Ltd. of the United Kingdom for potential purchase and installation onto military platforms that require robust Global Positioning System (GPS) navigation performance for Day One Strike Warfare capability. Raytheon Systems Ltd. is the only manufacturer of this critical GPS technology today for fielding GPS anti-jam antenna systems in the near-term and is currently in production on a larger variant (GAS-1) for the Air Force.

Combat Vehicle Troop Seat — Sweden. This FCT project is evaluating a Troop Compartment Seat manufactured by Haaglunds of Sweden which is currently in use on the CV-9030 vehicle employed by Norwegian Armed Forces, for potential application to the Marine Corps' Advanced Amphibious Assault Vehicle. It appears that the Haaglunds seat will meet the Marine Corps' requirements and may provide significant weight and cost savings.

Joint Protective Aircrew Ensemble — France, Germany, Israel, Sweden, United Kingdom. While the Joint Services Lightweight Integrated Suit Technology program addresses new technologies for ground troops in chemical/biological (CB) protection, CB garments for the aviation community have not been updated for over a decade. This FCT project is evaluating thirteen (13) different foreign NDI alternative items of this type manufactured by Rempoy Ltd. and Lantor of the United Kingdom, NEWPAC of Sweden, Paul Boye of France, Alfred Karcher of Germany, and Israel to determine whether they meet Navy requirements.

Lightweight Aluminum Track — Germany. This FCT project is evaluating a lightweight aluminum track for the Advanced Amphibious Assault Vehicle (AAAV). The track under evaluation is a modification of an existing track manufactured by Diehl (Germany). If successful, the German item will provide the AAAV program with the lightest production track available, weighing 500 pounds lighter than the current AAAV track.

Lightweight Diesel Driven Auxiliary Power Unit (APU) — Germany, United Kingdom. This FCT project is evaluating lightweight high-speed diesel engine auxiliary power units for use on the Advanced Amphibious Assault Vehicle (AAAV). Fischer Panda of Germany and Mid-West Engines of the United Kingdom have developed a series of lightweight, quiet APUs for the commercial marine industry. These units possess a high power to weight ratio and promise to provide superior acoustic noise performance.

Star Tracker — Denmark (joint with Air Force). The Navy and Air Force are evaluating the Terma Elektronik HE 5AS Star Tracker system to quantify its ability to provide absolute, three-axis attitude for spacecraft control, pointing of payloads, and localization of ground observation required by many satellites. The Danish item offers a reliable and affordable attitude-determination system for a wide range of DoD satellites.

Stealth Screen System — France. This project will evaluate a system that reduces a ship's radar signature. The Stealth Screen System, manufactured by Societe Nouvelle des Ateliers et Chantiers du Havre (France), is a wire mesh screen that will cover the Remote Mine Hunting System aboard AEGIS Destroyers. The system is designed to provide a flat surface that matches the radar cross-section properties of the skin of the ship around the opening for the mine hunting system.

Supersonic Target Missile — Russia. This FCT is evaluating Russian Federation SS-N-22 missiles (NATO designation Sunburn) offered to the U.S. Navy by the Russian Ministry of Defense. In view of the emerging anti-ship missile threat in the Pacific area, the Navy has a requirement to validate, test, and improve defensive systems against this long range, all-weather, supersonic, sea-skimming missile, and the domestic target currently used does not adequately replicate the characteristics of the Russian missile.

Air Force New Start Projects

Airborne Video Recorder/Replay System — France. This FCT will evaluate a new, state-of-the-art recorder/replay system developed by Enertec of France, with the objective of providing a reliable and cost effective alternative for flight test at the Air Force Flight Test Center (AFFTC). Currently, flight test aircraft of all types at the AFFTC use a tape recorder for on board video recordings that is unreliable. The proposed recorder/replay system is smaller, has more storage capacity, uses hard disk as storage, does not need external encoder/decoder units, and is more reliable.

Infrared/UV Threat Stimulator — United Kingdom. The Air Force has a training requirement to trigger IR/UV missile warning systems on combat aircraft. This FCT will evaluate a system, developed by Elettronica UK Ltd., with the advertised capability to simulate IR/UV rocket motor signatures from IR MANPAD surface-to-air missile threats. Aircrews will then be able to observe valid missile warning systems on combat training ranges and learn to react to simulated threats before being subjected to actual threats in combat.

Tactical Long Range Passive IR Sensor — Australia. This FCT will evaluate the ADPRO 250A developed by Vision Systems of Australia as a candidate sensor for the Tactical Automated Security System (TASS). TASS provides perimeter detection, assessment and reporting with an integrated suite of sensors, communications equipment, thermal imagers and alarm annunciators. The Australian item incorporates signal processing into a passive infrared long-range sensor. This is a significant advantage over simple threshold detection that is susceptible to nuisance alarms from the environment and small animals.

Unattended Ground Imager — Israel. The Air Force has a requirement for covert, long-range, standoff perimeter approach surveillance for Security Forces operating in Air Base Ground Defense or Deployment operations. Severe inclement weather can reduce the effective range of current imagers to less than 500 meters. This FCT project will evaluate the Unattended Ground Imager, developed by Seraphim Optronika, Ltd. of Israel, which is a man-portable, integrated detection and assessment system capable of supporting deployed security perimeter applications or as unattended ground sensors for combat information gathering.

Air Force Continuing Projects

Infrared Flare for C-17 Aircraft — Germany. This FCT evaluation of an Infrared Flare developed by Buck Industries of Germany is intended to extend combat mission profiles against current, highly capable surface-to-air missile threats. This FCT will facilitate the concurrent comparative testing of the German flare and U.S.-produced infrared flares.

Plastic Practice Bombs — United Kingdom. This FCT project is evaluating a plastic practice bomb candidate manufactured by Portsmouth Aviation of the United Kingdom for use on Air Force aircraft such as the F-16, A-10, F-15, and B-52. The FCT test program will confirm the operational effectiveness and suitability of the candidate along with the potentially dramatic improvement to the environment and economical aspects of Air Force training range cleanup.

Retractable Arresting Cable System — France. This FCT project is evaluating a system developed by Aératur of France that locks the arresting cable in the up position when needed (for fighter aircraft) and retracts the cable when not required (for commercial and military cargo aircraft). This retraction reduces wear of the cable, since every aircraft using the runway will not have to trample it. This nondevelopmental retractable system is currently used in the Czech Republic, France, Spain, Saudi Arabia, and Switzerland.

Space Qualified Digital Signal Processor — Austria, France. This FCT project is evaluating a Digital Receiver Processing Module developed by Austrian Aerospace, which includes a Digital Signal Processor developed by Temic Semiconductor of France to potentially meet the requirements of the Spaced Based Infrared Systems, MILSATCOM, and other military space system procurement programs. Originally, Dornier Satellite Systems was included in the evaluation, but was dropped from the project because of the cost of its item.

Wideband Klystron for E-3 AWACS — United Kingdom. The Air Force has a requirement to improve E-3 AWACS power amplifier reliability for its main search radar. The current klystron power amplifier has a low mean-time-between-failure (MTBF) and is costly to repair. This FCT project is evaluating a wide-band klystron power amplifier manufactured by Thorn TMD (UK) which promises greater reliability and much lower operating and maintenance costs.

Wind Tunnel Internal Force Balance — France, Germany, Netherlands, United Kingdom. The wind tunnel force balances currently in use at the Air Force's Propulsion Wind Tunnel facility at Arnold Engineering Development Center were built using technology developed in the 1950's and 1960's. As a result, most of the balances are outdated, and many are becoming mechanically worn out. This FCT project is evaluating an array of internal force balances manufactured by

Aerotech/DERA of the United Kingdom, ONERA of France, TUD of Germany, and NLR of the Netherlands.

U.S. Special Operations Command New Start Projects

Advanced Demolition Weapons— France, Germany, Sweden. This project will evaluate various shoulder-fired weapons that can be fired from confined spaces and can meet a range of Special Operations Forces missions from Military Operations in Urban Terrain, anti-armor, to direct engagement of targets in protected/covered areas. The FCT will consist of a series of live-fire assessments by representative users and munitions experts to determine which weapons are most effective against a number of targets ranging from reinforced concrete, to triple brick walls, enemy armor, and defilade positions. Candidates that are expected to participate are from Diehl/Dynamit Nobel of Germany, Bofors of Sweden, and GIAT of France.

Chemical Protective Gloves — Austria, Canada, France, Germany. Special Operations Forces require an immediate replacement for the current chemical protective glove. The current 14 or 25 mil thickness butyl gloves are not tactile enough, and the 7 mil thickness gloves are not durable enough. This FCT will consist of a series of operational field tests conducted in different chemical and Petrol/Oil/Lubricant environments to determine if the gloves are fully capable to meet mission requirements. The candidates expected to participate in this evaluation are developed by Goetsloff of Austria, Acton International of Canada, Paul Boye of France, and Texplorer and Alfred Karcher GmbH (both of Germany).

MAAWS Illumination Round — Sweden. This FCT project will qualify, for the Navy Special Warfare Command, the Bofors Carl Gustaf illumination ammunition with a fuze that meets U.S. safety standards. These standards were previously waived for the version currently fielded with U.S. forces, and the waiver quantity limit has been reached. The Swedish round incorporates an infrared candle visible only with night vision devices in place of the current white light candle.

Man-Portable MultiSensor System — Russian Federation –Scientific Research Institute. This FCT project will evaluate lightweight, hand-held and/or portable electronic warfare component items developed by Metravib of France, the Scientific Research Institute of the Russian Federation, and FLIR of Sweden against requirements of the U.S. Special Operations Command Joint Threat Warning System program. The candidates offer all-weather detection capability against ground, air and, in particular, maritime and river vessels.

Personal Temperature Regulation System – Germany. This FCT project will evaluate the effectiveness of personal temperature regulation garments (undergarments, outer garments, hats and gloves) for use by warfighters performing a variety of tasks at different activity levels in varying temperature ranges. The garments, developed by Texplorer of Germany, help regulate the body's temperature within a comfortable range.

U.S. Special Operations Command Continuing Projects

Advanced Lightweight Grenade Launcher Ammunition — Germany, Norway, Sweden.

This FCT project is evaluating air-bursting ammunition manufactured by Bofors AB of Sweden, Nordic Ammunition Company of Norway, and Diehl of Germany for use in the ongoing U.S. Special Operations Command acquisition program for the Advanced Lightweight Grenade Launcher. The candidate ammunition promises the capability to engage targets in defilade positions or urban areas.

MC-130H Aerial Refueling System Pod — United Kingdom. This project is evaluating an aerial refueling capability for the MC-130H Combat Talon II. Manufactured by Flight Refuelling, Ltd. Of the United Kingdom, the system provides a wing-mounted hose and drogue aerial refueling pod capable of meeting U.S. Special Operations Command requirements. Currently, Special Forces rotary wing aircraft have insufficient refueling support to meet mission requirements. This system is a pre-planned product improvement envisioned for the MC-130H to meet this shortfall.